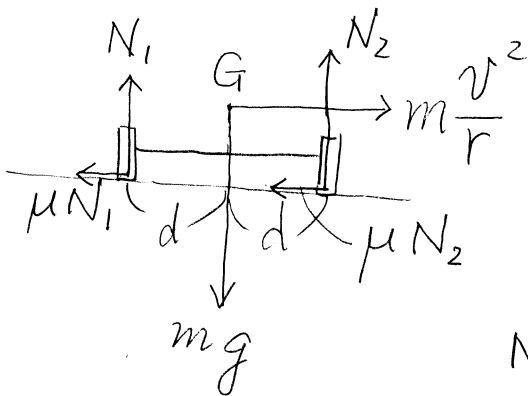


$$(1) \quad m \frac{v^2}{r} \leq \mu mg$$

$$v \leq \sqrt{\mu gr} \quad (P)$$



$$N_1 + N_2 = mg \quad \text{--- (1)}$$

Gの回りで"

$$N_2 d - N_1 d - \mu(N_1 + N_2) h = 0 \quad \text{--- (2)}$$

①, ②より $(mg - N_1) d - N_1 d - \mu mg h = 0$

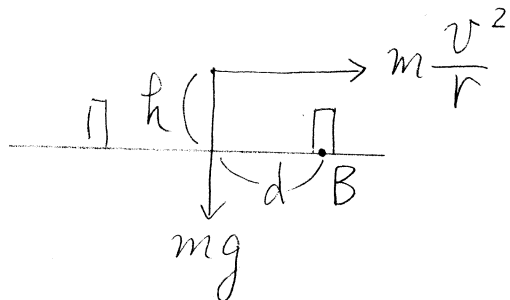
$$mg(d - \mu h) = 2 N_1 d$$

$$N_1 = \frac{d - \mu h}{2d} mg \quad (T)$$

$$N_2 = mg - N_1 = \left(1 - \frac{d - \mu h}{2d}\right) mg$$

$$= \frac{d + \mu h}{2d} mg \quad (U)$$

(2) 浮くのは内側の車輪になる。



Bの回りで"

$$m \frac{v^2}{r} h = mg d$$

$$v = \sqrt{\frac{gdr}{h}} \quad (I)$$

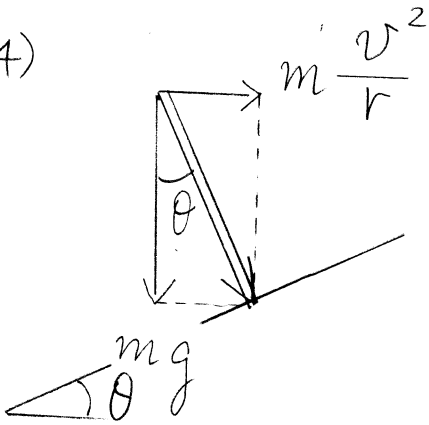
(27-2)

(3) (ア)と(エ)を比較して,

$$\sqrt{\mu g r} < \sqrt{\frac{g d r}{h}}$$

$$\mu < \frac{d}{h} \quad (\text{†})$$

(4)



$$\tan \theta = \frac{m \frac{v^2}{r}}{m g} = \frac{v^2}{g r}$$